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EXAMINER

MURPHY, DILLON J

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

- This action is responsive to the amendment filed on August 18, 2006.
- Claims 11-27 are pending. Claims 1-10 are canceled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-13, 15, 19, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Al-Hussein (US 5,809,167) in view of Lo et al. (US 6268927), hereafter Al-Hussein and Lo.

Regarding claim 11, Al-Hussein teaches a method practiced by a printer (Al-Hussein, fig 3, printer #26. Also see col 5, ln 27-32, printer #26 for printing. Also see col 5, ln 53-67, for printing a document) for printing a document comprising the steps of accessing document imaging data from at least one store via a network with the printer (Al-Hussein, col 6, ln 12-16, files are accessed from network disk. Additionally, the actions are performed by the printer itself, which comprises a general purpose computer, col 5, ln 53-60. Thus, any actions performed on any general purpose computer may be performed within the personal imaging computer system (PICS) of Al-Hussein), retrieving the document imaging data from the at least one store, and printing

Art Unit: 2625

the document imaging data with the printer (Al-Hussein, col 6, ln 22-25, method comprises retrieving the document image and associated text file and printing at a printer). Al-Hussein does not disclose expressly the method of merging and printing form data, although form data falls under the category of a document. Lo teaches a method practiced by a printer for printing a form comprising merging the retrieved form imaging data with the already stored static form data on the printer to generate a completed form (Lo, col 5, ln 64-col 6, ln 2, wherein user data is received by the printer and the data is overlaid, i.e. merged, on the EPS form image, i.e. static form data. Also see figure 3 for an overview of receiving dynamic data and merging received data with static data. In col 5, ln 38-40, static form data is stored on the storage device, and in col 5, ln 20-25, printer may include an internal mass storage device, #3 of fig 3), and printing the form imaging data along with the already stored static form data together as a hard copy form (Lo, fig 3, received data, i.e. user data, and already stored static form data, i.e. form in storage #3, are printed together as composite image "form + data". Also see col 5, ln 64-col 6, ln 2), such that printing a hard copy form is possible without the need to send the static form data to the printer and such that a copy of the static form data need only be stored on the printer (Lo, col 6, ln 60-67, only dynamic data is sent. In col 11, ln 41-42, and Table 1, dynamic data is downloaded to printer without static data showing time savings. Also see col 12, ln 15-17, wherein form need only be stored on the mass storage device, previously shown to be incorporated into printer).

Al-Hussein and Lo are combinable because they are in the same field of endeavor of printing systems and data control. At the time of the invention, it would

Art Unit: 2625

have been obvious to a person of ordinary skill in the art to combine the method of merging the retrieved form imaging data with the already stored static form data on the printer of Lo, and printing the form such that printing a hard copy is possible without the need to send the static form data to the printer with the methods of Al-Hussein comprising accessing, retrieving, and printing document data by the printer. The motivation for doing so would have been to access files for printing remotely, as well as to retrieve a document image and text file for later printing (Al-Hussein, col 3, ln 51-55). Additionally, the suggestion for accessing and retrieving files with the printer was given by Lo in col 5, ln 31-35, teaching a utility stored in the printer to facilitate file downloading and file management procedures. Therefore, it would have been obvious to combine Lo with Al-Hussein to obtain the invention as specified in claim 11.

Regarding claim 12, which depends from claim 11, the combination of Al-Hussein and Lo further teaches a method wherein the at least one store comprises a graphic store and a composition store (Al-Hussein, col 7, ln 39-51, images and text are stored in memory).

Regarding claim 13, which depends from claim 11, the combination of Al-Hussein and Lo further teaches a method wherein the at least one store is associated with an imaging service stored on the printer that is configured to facilitate form completion (Al-Hussein, col 7, ln 39-51, CPU associated with imaging service controls program instruction sequences which manipulate document images. Word processor, image processing, and spreadsheet processing, i.e. programs for form processing, are stored in the PICS of Al-Hussein, col 5, ln 60-67).

Regarding claim 15, which depends from claim 11, the combination of Al-Hussein and Lo further teaches a method wherein accessing form imaging data comprises accessing imaging data through use of an imaging extension (Al-Hussein, col 7, ln 39-51, CPU associated with imaging service controls program instruction sequences which access and manipulate document images. Program of Al-Hussein provides generating and mapping of client instructions).

Regarding claim 19, the combination of Al-Hussein and Lo teaches a system stored on a printer for printing a form, the system comprising:

Means provided on the printer for accessing form imaging data form at least one store via a network (Al-Hussein, col 6, ln 12-16, files are accessed from network disk. Files are stored in server #41 on network disk #42, while being accessed via network #31 in figure 4. Also see Lo, fig 3, wherein user data is received from a network computer, col 5, ln 8-11);

Means for merging the retrieved form imaging data with static form data already stored of the printer to generate a completed form (Lo, col 5, ln 64-col 6, ln 2, wherein user data is received by the printer and the data is overlaid, i.e. merged, on the EPS form image, i.e. static form data. Also see figure 3 for an overview of receiving dynamic data and merging received data with static data. In col 5, ln 38-40, static form data is stored on the storage device, and in col 5, ln 20-25, printer may include an internal mass storage device, #3 of fig 3); and

Means for printing the form imaging data along with the already stored static form data together as a hard copy form (Lo, fig 3, received data, i.e. user data, and already

Art Unit: 2625

stored static form data, i.e. form in storage #3, are printed together as composite image "form + data". Also see col 5, ln 64-col 6, ln 2),

Wherein printing a hard copy form is possible with the system without the need to send the static form data to the printer and wherein a copy of the static form data need only be stored on the printer (Lo, col 6, ln 60-67, only dynamic data is sent. In col 11, ln 41-42, and Table 1, dynamic data is downloaded to printer without static data showing time savings. Also see col 12, ln 15-17, wherein form need only be stored on the mass storage device, previously shown to be incorporated into printer).

Regarding claim 24, the combination of Al-Hussein and Lo further teaches a printer, comprising:

Memory (Al-Hussein, in figure 5, Personal Imaging Computer System #20, "PICS," comprises CPU #60, RAM Memory #79, ROM #77, and disk storage #75 for storing and executing instructions for image processing, col 7, ln 61-67 and col 8, ln 1-9), including logic configured to:

Access form imaging data (As explained in the rejection of claim 11, the document of Al-Hussein covers the forms as taught by Lo) from at least one store via a network (Al-Hussein, col 6, ln 12-16, files are accessed from network disk. Files are stored in server #41 on network disk #42, while being accessed via network #31 in figure 4. Also see Lo, fig 3, wherein user data is received from a network computer, col 5, ln 8-11),

Retrieve the form imaging data, merge the received data with static form data already stored on the printer to generate a completed form (Lo, col 5, ln 64-col 6, ln 2,

Art Unit: 2625

wherein user data is received by the printer and the data is overlaid, i.e. merged, on the EPS form image, i.e. static form data. Also see figure 3 for an overview of receiving dynamic data and merging received data with static data. In col 5, ln 38-40, static form data is stored on the storage device, and in col 5, ln 20-25, printer may include an internal mass storage device, #3 of fig 3), and print the form imaging data along with the already stored static form data as a hard copy form (Al-Hussein, col 6, ln 22-25, method comprises retrieving the document image and associated text file and printing at a printer. Printer is shown as printer, #45, in figure 4. See also Lo, fig 3, wherein received data, i.e. user data, and already stored static form data, i.e. form in storage #3, are printed together as composite image "form + data". Also see col 5, ln 64-col 6, ln 2), wherein printing a hard copy form is possible with the printer without the need to sent the static form data to the printer and wherein a copy of the static form data need only be stored on the printer (Lo, col 6, ln 60-67, only dynamic data is sent. In col 11, ln 41-42, and Table 1, dynamic data is downloaded to printer without static data showing time savings. Also see col 12, ln 15-17, wherein form need only be stored on the mass storage device, previously shown to be incorporated into printer).

Regarding claim 25, which depends from claim 24, the combination of Al-Hussein and Lo further teaches a printer wherein the logic comprises a network-based printing service (Al-Hussein, figure 4, printers #45, #20, and #56 are connected to LANs #32 and #46, respectively).

Claims 14, 16-18, 20-23, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Al-Hussein in view of Lo and further in view of LeClair et al. (US 6636891) and further in view of Pennell et al. (US 6910179).

Regarding claim 14, which depends from claim 13, the combination of Al-Hussein and Lo teaches a method practiced by a printer for printing a form comprising accessing form image data, retrieving the form imaging data, merging the retrieved form imaging data with already stored static form data, and printing the form imaging data along with the already stored static form data as a hard copy, such that printing the hard copy is possible without the need to send the static data to the printer, wherein at least one store is associated with an imaging service stored on the printer. Although the combination of Al-Hussein and Lo teaches a method wherein the PICS is a general purpose computer combined with a printer connected to a network, the combination does not disclose expressly wherein the imaging service comprises a network-based form processing service hosted by the printer. LeClair, however, teaches a method of hosting a network-based imaging service hosted by a printer (LeClair, col 7, ln 55-59, printer hosts processing in embedded server, and col 8, ln 1-3, user invokes a browser connected to internet to submit and receive information).

Al-Hussein, Lo and LeClair are combinable because they are from the same field of endeavor of printing systems and data control. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the method of LeClair comprising hosting a network based imaging service hosted by a printer with the method of Al-Hussein and Lo comprising accessing form image data, retrieving the form

Art Unit: 2625

imaging data, merging the retrieved form imaging data with already stored static form data, and printing the form imaging data along with the already stored static form data as a hard copy, such that printing the hard copy is possible without the need to send the static data to the printer, wherein at least one store is associated with an imaging service stored on the printer. The motivation for doing so would have been to allow multiple computer workstations or personal computers to share input and output devices (LeClair, col 1, ln 17-20).

The combination of Al-Hussein, Lo, and LeClair teaches a method practiced by a printer for generating a form comprising accessing form image data, retrieving the form imaging data, merging the retrieved form imaging data with already stored static form data, and printing the form imaging data along with the already stored static form data as a hard copy, such that printing the hard copy is possible without the need to send the static data to the printer, wherein at least one store is associated with an imaging service stored on the printer, and wherein the imaging service comprises a network-based processing service hosted by the printer. The combination of Al-Hussein, Lo and LeClair does not disclose expressly a method wherein the form processing is web-based. Pennell, however, teaches a method for inputting form data via a browser (Pennell, col 2, ln 11-12).

Al-Hussein, Lo, LeClair, and Pennell are combinable because they are from a similar field of endeavor of data processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the method of Pennell comprising web-based form processing with the combination of Al-Hussein, Lo, and

Art Unit: 2625

LeClair comprising a method practiced by a printer for generating a form comprising accessing form image data, retrieving the form imaging data, merging the retrieved form imaging data with already stored static form data, and printing the form imaging data along with the already stored static form data as a hard copy, such that printing the hard copy is possible without the need to send the static data to the printer, wherein at least one store is associated with an imaging service stored on the printer, and wherein the imaging service comprises a network-based processing service hosted by the printer. The motivation for doing so would have been to allow any user regardless of their location to access the form processing features as taught by the combination of Al-Hussein, Lo, and LeClair. Therefore, it would have been obvious to combine Pennell with the combination of Al-Hussein, Lo, and LeClair to obtain the invention as specified in claim 14.

Regarding claim 16, which depends from claim 15, the combination of Al-Hussein, Lo, LeClair, and Pennell teaches a method practiced by a printer for printing a form, wherein the imaging extension comprises part of a user browser (LeClair, col 8, ln 1-3, printing commands are issued from a browser over the internet. Also see Pennell, fig 4, wherein the browser is used for form processing. It is well known that a browser as taught by Pennell and LeClair comprises at least one imaging extension such as WinSock API).

Regarding claim 17, which depends from claim 15, the combination of Al-Hussein, Lo, LeClair and Pennell teaches a method practiced by a printer for printing a form wherein the imaging extension comprises part of a network-based printing service

Art Unit: 2625

hosted by the printer (LeClair, col 7, ln 57-65, instructions issued to retrieve documents are sent by browser, col 8, ln 1-3, which is hosted by printer, in network connected to printer figure 3, I/O device #350 connected to network #300, browser is viewed in display #322, connected to server #310 and network. Also see col 9, ln 30-34 of LeClair, wherein a print request printing the forms as taught by Lo, may be received by the network based printer. It is well known in the art that a browser as taught by Pennell and LeClair comprises at least one imaging extension such as WinSock API).

Regarding claim 18, which depends from claim 17, the combination of Al-Hussein, Lo, LeClair, and Pennell teaches a method wherein the printing service is hosted by an embedded server of the printer (LeClair, col 7, ln 55-59, printer hosts processing in embedded server. Processing occurs in server in printer to process images comprising documents and forms).

Regarding claim 20, which depends from claim 19, the combination of Al-Hussein, Lo, LeClair, and Pennell teaches a system stored on a printer for printing a form wherein the means for accessing form imaging data comprises an imaging extension (Al-Hussein, col 7, ln 39-51, CPU associated with imaging service controls program instruction sequences which access and manipulate document images. In figure 5, disk #75, where image and text files are stored, is interfaced with SCSI interface #76 to computer bus #61. Also see, LeClair, col 8, ln 1-3, printing commands are issued from a browser over the Internet. Also see Pennell, fig 4, wherein the browser is used for form processing. It is well known that a browser as taught by Pennell and LeClair comprises at least one imaging extension such as WinSock API).

Regarding claim 21, which depends from claim 20, the combination of Al-Hussein, Lo, LeClair, and Pennell teaches a system stored on a printer for printing a form wherein the imaging extension comprises part of a user browser (LeClair, col 8, ln 1-3, printing commands are issued from a browser over the internet. Also see Pennell, fig 4, wherein the browser is used for form processing. It is well known in the art that a browser as taught by Pennell and LeClair comprises at least one imaging extension such as WinSock API).

Regarding claim 22, which depends from claim 20, the combination of Al-Hussein, Lo, LeClair, and Pennell teaches a system stored on a printer for printing a form wherein the imaging extension comprises part of a network-based printing service hosted by the printer (LeClair, col 7, ln 57-65, instructions issued to retrieve documents are sent by browser, col 8, ln 1-3, in network connected to printer (figure 3), I/O device #350 connected to network #300, browser is viewed in display #322, connected to server #310 and network. Embedded server of LeClair may host form process website as taught by Pennell. Additionally, it is well known in the art that a browser as taught by Pennell and LeClair comprises at least one imaging extension such as WinSock API).

Regarding claim 23, which depends from claim 22, the combination of Al-Hussein, Lo, LeClair, and Pennell teaches a system stored on a printer for printing a form wherein the printing service is hosted by an embedded server of the printer (LeClair, col 7, ln 57-65, instructions issued to retrieve documents are sent by browser, col 8, ln 1-3, which is hosted by printer, in network connected to printer figure 3, I/O device #350 connected to network #300, browser is viewed in display #322, connected

Art Unit: 2625

to server #310 and network. Also see col 9, ln 30-34 of LeClair, wherein a print request printing the forms as taught by Lo, may be received by the network based printer. It is well known in the art that a browser as taught by Pennell and LeClair comprises at least one imaging extension such as WinSock API).

Regarding claim 26, which depends from claim 24, the combination of Al-Hussein, Lo, LeClair, and Pennell further teaches a printer wherein the logic comprises an imaging extension that is configured to access the at least one store (Al-Hussein, col 8, ln 67 and continuing to col 9, ln 1-8, program of PICS includes logic for an imaging extension configured to access at least one store, i.e. the program has capabilities to create, store, and access text files and associated image files from various storage media. Also see LeClair, col 8, ln 1-3, printing commands are issued from a browser over the internet. Also see Pennell, fig 4, wherein the browser is used for form processing. It is well known in the art that a browser as taught by Pennell and LeClair comprises at least one imaging extension such as WinSock API).

Regarding claim 27, which depends from claim 24, the combination of Al-Hussein, Lo, LeClair, and Pennell teaches a printing system further comprising an embedded server (LeClair, col 7, ln 55-59, printer comprises an embedded server. In figure 3, server #310 may be embedded in I/O device #350. Processing occurs in server in printer to process images comprising documents and forms).

Response to Arguments

Applicant's arguments filed August 18, 2006 have been fully considered but they are not persuasive.

On page 8 of Remarks, Applicant states "Al-Hussein's PICS equipment 20 is not a "printer" and does not function as a printer. Instead... the equipment 20 comprises a facsimile machine that has the characteristics of a computer". The examiner respectfully disagrees with Applicants interpretation of the PICS equipment of Al-Hussein. As seen in fig 3 and explained in col 5, In 15-41, the PICS equipment is carefully disclosed to comprises a scanner #22, a printer #26, a facsimile/modem portion, and general purpose computer, as seen in fig 5. Clearly the PICS equipment of Al-Hussein reads on the printer as claimed by Applicant.

On pages 8-9 of Remarks, Applicant states: "Although the equipment 20 can scan and fax documents as well as print received fax transmissions, Al-Hussein does not state that the equipment is used as a printer that, as is well known in the art, receives print ready data from a computer (e.g., PC or print server), renders the data as an image, and prints the image". The examiner respectfully disagrees, citing col 5, In 53-60 of Al-Hussein, wherein the PICS equipment is configured to operate as a printer/computer combination, wherein documents are generated and printed according to the general computing systems. In lines 57-58 the PICS is expressly disclosed as being capable to "print out document images".

Applicant cites fig 4 as evidence supporting the assertion that the PICS of Al-Hussein is not a printer. Applicant states, on page 9, that the presence of separate

Art Unit: 2625

printers 45 and 56 teach that the PICS equipment provide the printer functionality lacking in the PICS equipment. Applicant cites col 6, ln 16-25 and col 6 ln 45-53, as teaching the printing in the system is provided by external printers, not the PICS. The examiner disagrees with Applicant's interpretation of the cited passages. The disclosure in col 6 is meant to teach the operation of the PICS in a networked environment, wherein the PICS may provide its capabilities to various networked devices (col 6, ln 2-4). In lines 16-25, it is clear that in the networked environment, the workstation, not the PICS, is printing the document on the remote printer. In lines 45-53 the workstation, not the PICS, is printing the document on the remote printer. As previously shown, the PICS is capable of printing document. The cited passages teach remote workstations 40 and 51 accessing the PICS equipment and printing on a remote printer.

On page 10, Applicant claims Al-Hussein does not teach "accessing" and "retrieving" data with the PICS. Applicant claims only the workstations may provide the accessing and retrieving functions. The examiner respectfully disagrees, citing col 5, line 53-67, wherein the PICS is explicitly disclosed as providing general purpose computer combined with a printer. In col 6, lines 16-25 and 45-53, the operation of a general computer on a network is described. The accessing and retrieving functions are thus provided by the PICS as well. Support for this assertion is seen, for example, in fig 7, wherein accessing and retrieving is explicitly shown as being performed on the PICS. In the display screen #35, accessing and retrieving function are shown.

The PICS equipment is used in to access and retrieve data as claimed in claim 11. This operation is described in col 9, ln 36-col 10, ln 60. In this passage, macro-like functions are programmed into function keys 77. The user is present at the PICS to perform processing. Upon pressing a preprogrammed function key, the PICS may access previously stored data from a remote data store, retrieve said data, perform image processing on said data, and present the processed data to the user via a display or by printing. Therefore, the operation of the PICS, in combination with other cited references, meets the limitations of claim 11.

Regarding claim 11: In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Al-Hussein's equipment and Lo's equipment are printers. The motivation for combining the Al-Hussein and Lo would have been to access files for printing remotely, as well as to retrieve a document image and text file for later printing (Al-Hussein, col 3, ln 51-55). Additionally, the suggestion for accessing and retrieving files with the printer was given by Lo in col 5, ln 31-35, teaching a utility stored in the printer to facilitate file downloading and file management procedures. Therefore, it would have been obvious to combine Lo with Al-Hussein to obtain the invention as specified in claim 11.

Regarding claim 19: On page 11, Applicant states that neither Al-Hussein nor Lo teach or suggest "means provided on the printer for accessing form imaging data from at least one store via a network" or "means provided on the printer for retrieving the form imaging data from the at least one store" for reasons described above. The examiner cites similar reasons as presented above for claim 11.

Regarding claim 19: In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Al-Hussein's equipment and Lo's equipment are printers. The motivation for combining the Al-Hussein and Lo would have been to access files for printing remotely, as well as to retrieve a document image and text file for later printing (Al-Hussein, col 3, ln 51-55). Additionally, the suggestion for accessing and retrieving files with the printer was given by Lo in col 5, ln 31-35, teaching a utility stored in the printer to facilitate file downloading and file management procedures. Therefore, it would have been obvious to combine Lo with Al-Hussein to obtain the invention as specified in claim 19.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Tachibana reference (US 5877869) is cited as teaching a facsimile apparatus operable as a printer. Assuming, *arguendo*, that the PICS equipment is not a printer, it can be shown that a facsimile can obviously operate as a printer.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon J. Murphy whose telephone number is (571) 272-5945. The examiner can normally be reached on M-F, 8-5.

Art Unit: 2625

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (571) 272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



DJM

November 5, 2006



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